Claims

1. Method for producing a fancy yarn, which corresponds to an existing model fancy yarn, characterised in that initially the model fancy yarn is guided through a measuring mechanism for measuring, in that at least one of the parameters of diameter and mass of the model fancy yarn is continuously measured by means of the measuring mechanism, in that the measured values are evaluated and the effect formation of the model fancy yarn is determined therefrom from the effect regions and webs located in between, in that a data set is formed from the data representing the effect formation, in that spinning settings are generated, based on the previously formed data set and in that a fancy yarn is produced with these spinning setting.

2. Method according to claim 1, characterised in that the effect region is determined in that the beginning of the effect is defined by meeting a first criterion and in that the end of the effect is defined by meeting a second criterion, in that a specifiable number of largest measured values is determined between the beginning and end of the effect, in that an average value is formed from the measured values determined, which represents the transverse dimension of the effect, and in that the effect length is determined from the beginning and end of the effect.

3. Method according to claim 2, characterised in that the transverse dimension of the web D_{ST} is determined outside the effect region, in order to determine the relative transverse dimension of the effects.

4. Method according to claim 2 or 3, characterised in that to determine the transverse dimension of the web D_{ST}, an arithmetic average of the transverse dimension of the yarn is initially formed from a predetermined length of yarn as the reference, in that the reference value is subtracted from the individual values of the transverse dimension of the yarn, and in that the transverse dimension of the web D_{ST} is then formed as the arithmetic average from all the negative values, which were measured adjacent to other negative values.

5. Method according to any one of claims 2, 3 or 4, characterised in that the transverse dimension of the D_E of the effect is formed as an average value from the four largest transverse dimensions between the beginning and end of the effect.

6. Method according to any one of claims 2 to 5, characterised in that considered as the first criterion is the exceeding of a limit value of the transverse dimension D_{GR}, which is greater by a defined amount than the transverse dimension of the web D_{ST} and in that the exceeding lasts over a predetermined yarn length L_V and in that considered as the second criterion is the falling below of the limit value D_{GR} and that the falling below lasts over a predetermined yarn length L_G.

7. Method according to claim 6, characterised in that the limit value D_{GR} is 15% greater than the transverse dimension of the web D_{ST}.

8. Method according to claim 6 or 7, characterised in that the predetermined yarn length is assumed to have been reached when the criterion is met over 6 consecutive measured values.

9. Method according to any one of claims 6 to 13, characterised in that a measured value is detected every two millimetres when measuring the yarn diameter.

10. Method according to any one of claims 1 to 9, characterised in that the repeat length of the effect formation is determined in that

- beginning at a selected instant, a number of last-measured effects and webs is compared with the same number of subsequent effects and webs,
- in that the extent of the agreement of the effect sequences consisting of the effects and webs is determined,
- in that the number of effects and webs on which the comparison is based is successively increased and
- in that the repeat length is defined by the number of effect sequences, in which the extent of agreement reaches a maximum.

11. Method according to claim 1, characterised in that the yarn produced is also measured, in that the effect formation of the yarn produced is determined and compared with the effect formation of the model fancy yarn, in that the spinning settings are changed until an adequate agreement between the effect formation of the yarn produced and the effect formation of the model fancy yarn is achieved.

12. Method according to claim 11, characterised in that the data set of the spinning settings for producing fancy yarn is stored after completed adjustment, with identification ensuring retrieval.

13. Method according to claim 12, characterised in that the spinning settings which, apart from the directly effect-related data, which vary with the changing transverse dimension of the yarn, also contain further data relating to the basic adjustment of the spinning machine, such as the rotor speed, opening cylinder speed and selection of the spinning means, are stored on a storage medium for further production of the fancy yarn.

14. Method according to claim 12 or 13, characterised in that the data is provided with addresses and addressed to the respective control units (22, 25, 35, 45, 46) provided for the corresponding control operations.

15. Device for carrying out the method according to claim 1, characterised by

- a measuring mechanism (31) for determining at least one parameter of diameter and mass of a model fancy yarn,
- an evaluation mechanism (32A), which determines the effect data of the model fancy yarn from the measured values,
- a yarn design unit (32), which generates the data required for spinning on a spinning machine, in particular a rotor spinning machine, from the effect data by means of a yarn design software and

- control mechanisms (22, 25, 35, 40) for controlling the drives (6, 11, 23) of the spinning machine based on the data transmitted by the yarn design unit (32).

16. Device according to claim 15, characterised in that the mechanisms (31, 32A, 32) mounted in front of the control mechanisms (22, 25, 35, 40), at least, however, the measuring mechanism (31), are configured as separate mechanisms.

17. Device according to claim 16, characterised in that the separate mechanisms (31, 32A, 32) are coupled to the control mechanisms (22, 25, 35, 40) via connections (33, 34).